STATEMENT OF CONSIDERATIONS

REQUEST BY AIR PRODUCTS AND CHEMICALS, INC. FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC36-02ID14321; W(A)-03-036; CH-1131

The Petitioner, Air Products and Chemicals, Inc., has requested a waiver of domestic and foreign patent rights for all subject inventions arising from its participation under the above referenced cooperative agreement and lower-tiered subcontracts entered thereunder. The cooperative agreement is entitled "Multi-partner Demonstration of Energy Efficient and Environmentally Improved Methods for the Production of Polyurethane Foam." This waiver does not apply to the rights of those parties subject to Public Law 96-517, as amended, nor shall it grant any rights in inventions made by employees of National Laboratories.

The objective of the cooperative agreement is to demonstrate Petitioner's liquid CO2 surfactant technology on a full scale production line in order to illustrate performance and utility to flexible urethane foam manufacturers. NCFI and Flexible Foam will partner with Petitioner to conduct full-scale production runs in their facilities to generate foam based on the liquid CO2 technology. Dow Corning will produce commercial scale quantities of the necessary surfactants for the demonstrations, including any required engineering developments. The Petitioner and its partners will conduct foam evaluations, as well as the generation and analysis of foam performance data. The performance of the surfactants will be compared to surfactants currently in use, as well as to the various new runs.

The period of performance is from 03/01/02 to 02/28/05, and the total anticipated cost of the cooperative agreement is \$1 million, with the Petitioner providing \$.5 million for about fifty percent (50%) cost sharing. This waiver is contingent upon the Petitioner maintaining, in aggregate, the above cost sharing percentage over the course of the agreement.

As noted in its waiver petition, Petitioner is a major US chemical company which has been helping customers increase productivity and product quality for 60 years through innovative application technologies. Petitioner is a worldwide leader in the production and supply of specialty and performance chemicals such as polyurethance additives and industrial and specialty gases and equipment. Dow Corning, since its establishment in 1943 is widely recognized as a worldwide leader in silicone technology. Dow Corning is actively involved in the development and production of surfactants for the polyurethane foam market for 40 years. NCFI, a division of Barnhardt Manufacturing Company, has over 35 years of foam formulation and manufacuring experience for the bedding and furniture industry, and the company is also experienced in insulation and packaging systems. Flexible Foam, a division of Ohio Dec Plastic Group, is among the largest supplier of foam and foam components nationwide, with over 50 years of manufacturing experience and industry knowledge. Considering Petitioner's technical expertise, established market position, and significant investment in this technology including sizable cost sharing in this cooperative agreement, it is reasonable to conclude that Petitioner will continue to develop and ultimately commercialize the technology and products which may arise from this cooperative agreement.

This waiver includes a waiver of patent rights in the subject inventions of Petitioner's lower tier subcontractors, provided that they agree to the same terms and conditions by which Petitioner will be granted the advance waiver. It is believed that this approach will facilitate timely commercialization of the technology by furthering the establishment of business and technical relationships between the parties and providing a mechanism for obtaining meaningful cost sharing between the parties. This waiver contemplates that the parties will allocate title or other rights to inventions among themselves as they deem appropriate during the course of their association consistent with the terms of this waiver. Accordingly, title will be waived directly to a subcontractor upon mutual agreement of the Petitioner and the subcontractor. However, this waiver will only apply to such subcontractor(s) who provide a letter to DOE acknowledging their right to ask for a waiver and agreeing to the terms of this waiver.

Petitioner has agreed that this waiver will be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, comparable to those set out in 35 U.S.C. 202-204. Further, Petitioner has agreed to the U.S. competitiveness provisions as attached to this Statement. In brief, Petitioner has agreed that products embodying intellectual property developed under this agreement will be substantially manufactured in the United States, and that Petitioner will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition. There are other well established suppliers of silicone surfactants using technologies similar to the ones contemplated in this cooperative agreement, and a waiver of rights is not likely to restrain competition. More likely, the success of this cooperative agreement will stimulate further investment and competition in this technology.

Considering the foregoing, it is believed that granting this waiver will provide Petitioner with the necessary incentive to invest its resources in the commercialization of the results of the cooperative agreement in a fashion which will make the above technology available to the public in the shortest practicable time. Therefore, upon evaluation of the waiver petition and in view of the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver be granted.

Daniel DVPark

Assistant Chief Counsel Intellectual Property Law

Division

Date: 10/24/03

Based upon the foregoing Statement of Considerations and representations in the

attached waiver petition, it is determined that the interests of the United States and the general public will best be served by a waiver of patent rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of the cooperative agreement, where through such modification or extension, the purpose, scope or cost of the cooperative agreement has been substantially altered.

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Buddy Garland Program Manager

Industrial Technology Program

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Date: ______

APPROVAL:

Assistant General Counsel for Technology Transfer and

Intellectual Property

Date: /- 22-04